

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/701,229

DATE: 09/24/2001

TIME: 15:35:31

Input Set : A:\20193P SeqList.txt

Output Set: N:\CRF3\09242001\I701229.raw

4 <110> APPLICANT: El-Sherbeini, Mohammed  
 5 Azzolina, Barbara  
 7 <120> TITLE OF INVENTION: MURD PROTEIN AND GENE OF PSEUDOMONAS  
 8 AERUGINOSA  
 10 <130> FILE REFERENCE: 20193P  
 12 <140> CURRENT APPLICATION NUMBER: 09/701,229  
 13 <141> CURRENT FILING DATE: 2000-11-28  
 15 <150> PRIOR APPLICATION NUMBER: 60/087,308  
 16 <151> PRIOR FILING DATE: 1999-05-26  
 18 <150> PRIOR APPLICATION NUMBER: PCT/US99/11585  
 19 <151> PRIOR FILING DATE: 1998-05-29

ENTERED

21 <160> NUMBER OF SEQ ID NOS: 4  
 23 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
 25 <210> SEQ ID NO: 1  
 26 <211> LENGTH: 1450  
 27 <212> TYPE: DNA  
 28 <213> ORGANISM: Pseudomonas aeruginosa  
 30 <400> SEQUENCE: 1

31	cgtgctgata	ggcctcgcca	ccttgaagct	gcgttgagga	cgaagagagc	atgagcctga	60
32	tcgcctccga	ccacttccgc	atcggtgtcg	gcctcgcaa	gagcggcatg	tccctggtgc	120
33	gctacctggc	gcgcgcgggc	ttgcctttcg	ccgtggtcga	taccgcagag	aaccgcgcgg	180
34	agctggccac	cctgcgtgcc	cagtatccgc	aggtggaagt	gcgttgccgc	gaactcgacg	240
35	ccgagttcct	ctgctccgcc	cgcgaaactct	atgtcagccc	cggttggtcg	ctgcgcaccc	300
36	ctgcgctggt	acaggccgcc	gcgaaaggcg	tgcgcatact	cggtgacatc	gatctcttcg	360
37	cccgcgaggc	gaaggccccc	atcgctcgcca	tcaccgggtc	caacgcgaag	agcaccgtga	420
38	ccaccctggt	gggcgaaatg	gcggtggccg	cggacaagcg	tgtcgccgtc	ggcggcaacc	480
39	tcggcaccoc	ggcgctcgac	ctgctggccg	acgacatcga	gctgtacgtg	ttggagctgt	540
40	cgagcttcca	gctggaaacc	tgcgatcgcc	tcaacgcgca	ggtggcgacc	gtgctgaacg	600
41	tcagcgaaga	ccatatggat	cgctacgacg	gcatggctga	ctaccacctg	gccaagcacc	660
42	ggatcttccg	cgggtccccg	caggtcgtgg	tgaatcgcg	cgatgccctg	accgcaccgc	720
43	tgatcgccga	taccgtgccg	tgtctggtcg	tcggcctgaa	caagccggac	ttcaaggctt	780
44	tcggcctgat	cgaggaagac	ggccagaagt	ggctggcggt	ccagttcgac	aagctgctgc	840
45	cggttggcga	actgaagatc	cgtggcgccc	acaactatc	caacgcgctc	gccgcgctgg	900
46	cgtggggcca	tgcggtcggc	ctgccgttcg	acgccatgct	cggcgcgctg	aaggcgtttt	960
47	ccggcctggc	tcategtg	cagtgggtac	gcgagcgcca	gggcgtgagc	tactacgacg	1020
48	attccaaggc	caccaacgtc	ggcgccgccc	tggcgcgcat	cgaggggctg	ggtgccgaca	1080
49	tcgacggcaa	gctggtgctg	ctcgccggcg	gagacggcaa	gggcgcgcat	ttccatgacc	1140
50	tgcgcgagcc	ggtcgcgcg	ttctgcccgg	cgggtggtact	gcttgccgtg	gacgcggggc	1200
51	tgattgccca	ggcactgggc	aacgcggtac	cgtggtgctg	cgtcgcaacg	ctggacgaag	1260
52	cagtccggca	ggccgcggag	ctggcccgcg	aaggcgatgc	ggtgctgttg	tcgccggcct	1320
53	gcgcgagcct	ggacatgttc	aagaacttcg	aagaacgcgg	acgcctgttc	gccaaagccg	1380
54	tagaggagct	agcgtgatgc	tgtcggtgtt	gcgccccttc	ccgtcgccgc	tgttgagccg	1440
55	gcacggcatc						1450

57 <210> SEQ ID NO: 2  
 58 <211> LENGTH: 448  
 59 <212> TYPE: PRT  
 60 <213> ORGANISM: Pseudomonas aeruginosa

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62 &lt;400&gt; SEQUENCE: 2

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63 Met Ser Leu Ile Ala Ser Asp His Phe Arg Ile Val Val Gly Leu Gly
64 1 5 10 15
65 Lys Ser Gly Met Ser Leu Val Arg Tyr Leu Ala Arg Arg Gly Leu Pro
66 20 25 30
67 Phe Ala Val Val Asp Thr Arg Glu Asn Pro Pro Glu Leu Ala Thr Leu
68 35 40 45
69 Arg Ala Gln Tyr Pro Gln Val Glu Val Arg Cys Gly Glu Leu Asp Ala
70 50 55 60
71 Glu Phe Leu Cys Ser Ala Arg Glu Leu Tyr Val Ser Pro Gly Leu Ser
72 65 70 75 80
73 Leu Arg Thr Pro Ala Leu Val Gln Ala Ala Ala Lys Gly Val Arg Ile
74 85 90 95
75 Ser Gly Asp Ile Asp Leu Phe Ala Arg Glu Ala Lys Ala Pro Ile Val
76 100 105 110
77 Ala Ile Thr Gly Ser Asn Ala Lys Ser Thr Val Thr Thr Leu Val Gly
78 115 120 125
79 Glu Met Ala Val Ala Ala Asp Lys Arg Val Ala Val Gly Gly Asn Leu
80 130 135 140
81 Gly Thr Pro Ala Leu Asp Leu Leu Ala Asp Asp Ile Glu Leu Tyr Val
82 145 150 155 160
83 Leu Glu Leu Ser Ser Phe Gln Leu Glu Thr Cys Asp Arg Leu Asn Ala
84 165 170 175
85 Glu Val Ala Thr Val Leu Asn Val Ser Glu Asp His Met Asp Arg Tyr
86 180 185 190
87 Asp Gly Met Ala Asp Tyr His Leu Ala Lys His Arg Ile Phe Arg Gly
88 195 200 205
89 Ala Arg Gln Val Val Val Asn Arg Ala Asp Ala Leu Thr Arg Pro Leu
90 210 215 220
91 Ile Ala Asp Thr Val Pro Cys Trp Ser Phe Gly Leu Asn Lys Pro Asp
92 225 230 235 240
93 Phe Lys Ala Phe Gly Leu Ile Glu Glu Asp Gly Gln Lys Trp Leu Ala
94 245 250 255
95 Phe Gln Phe Asp Lys Leu Leu Pro Val Gly Glu Leu Lys Ile Arg Gly
96 260 265 270
97 Ala His Asn Tyr Ser Asn Ala Leu Ala Ala Leu Ala Leu Gly His Ala
98 275 280 285
99 Val Gly Leu Pro Phe Asp Ala Met Leu Gly Ala Leu Lys Ala Phe Ser
100 290 295 300
101 Gly Leu Ala His Arg Cys Gln Trp Val Arg Glu Arg Gln Gly Val Ser
102 305 310 315 320
103 Tyr Tyr Asp Asp Ser Lys Ala Thr Asn Val Gly Ala Ala Leu Ala Ala
104 325 330 335
105 Ile Glu Gly Leu Gly Ala Asp Ile Asp Gly Lys Leu Val Leu Leu Ala
106 340 345 350
107 Gly Gly Asp Gly Lys Gly Ala Asp Phe His Asp Leu Arg Glu Pro Val
108 355 360 365
109 Ala Arg Phe Cys Arg Ala Val Val Leu Leu Gly Arg Asp Ala Gly Leu
110 370 375 380

```

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```

111 Ile Ala Gln Ala Leu Gly Asn Ala Val Pro Leu Val Arg Val Ala Thr
112 385                      390                      395                      400
113 Leu Asp Glu Ala Val Arg Gln Ala Ala Glu Leu Ala Arg Glu Gly Asp
114                      405                      410                      415
115 Ala Val Leu Leu Ser Pro Ala Cys Ala Ser Leu Asp Met Phe Lys Asn
116                      420                      425                      430
117 Phe Glu Glu Arg Gly Arg Leu Phe Ala Lys Ala Val Glu Glu Leu Ala
118                      435                      440                      445

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120 &lt;210&gt; SEQ ID NO: 3

121 &lt;211&gt; LENGTH: 25

122 &lt;212&gt; TYPE: DNA

123 &lt;213&gt; ORGANISM: Pseudomonas aeruginosa

125 &lt;400&gt; SEQUENCE: 3

126 ttctcgagat gagcctgata gcctc

25

128 &lt;210&gt; SEQ ID NO: 4

129 &lt;211&gt; LENGTH: 26

130 &lt;212&gt; TYPE: DNA

131 &lt;213&gt; ORGANISM: Pseudomonas aeruginosa

133 &lt;400&gt; SEQUENCE: 4

134 ttggatcctc acgctagctc ctctac

26

VERIFICATION SUMMARY

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